Meter Designs Reduce Operation Costs for Industry



Marshall Space Flight Center

APlus-QMC LLC Humble, TX

NASA Technology

- During routine ground testing of a shuttle engine, the measuring device for liquid oxygen failed, resulting in a fire that burned the test stand beyond repair.
- Scientists were looking for a more reliable way of measuring flow rates, which evaluate performance, reliability, and safety.

Technology Transfer

- Through Small Business Innovation Research (SBIR) funding, Quality Monitoring and Control (QMC) developed the balanced flow meter (BFM).
- In 2007 the technology was designated Marshall Space Flight Center Invention of the year; in 2010 it won the Federal Laboratory Consortium National Excellence in Technology Transfer award.



Benefits

- QMC founded Aplus-QMC to commercialize the technology, which produces flow measurement accuracies around 0.2 percent in very harsh environments and with no moving parts.
- The product is now used at chemical plants, refineries, power plants, and pharmaceutical plants, and its success has create 100 new jobs.